Dear Manufacturer:

SUBJECT: Ballasting Procedure for Tier 1 HLDTs

The enclosed letter was recently sent to the of American Automobile Manufacturers Association (AAMA). It is in response to a request that EPA approve their procedure for calculating adjusted load vehicle weight (ALVW), calculating drive axle weight, and ballasting Tier 1 heavy light-duty trucks (HLDTs). Subject to the limitations described in the enclosed letter, it provides an acceptable method for ballasting HLDTs for emission testing, mileage accumulation, and coastdown horsepower determination. The letter is provided for your information and planning purposes.

Questions and comments should be addressed to your EPA Certification team representative.

Sincerely,

Robert Maxwell, Director Certification Division Office of Mobile Sources

cc: K. D. Drachand, CARB

Enclosure

## February 23, 1994

Mr. Gerald A. Esper, Director Vehicle Environment Department American Automobile Manufacturers Association 7430 Second Avenue, Suite 300 Detroit, MI 48202

Dear Mr. Esper:

Subject: Ballasting Procedure for Tier 1 HLDTs

Thank you for your letter of November 3, 1993, regarding the ballasting of heavy light-duty trucks (HLDTs) during emission mileage accumulation, and coastdown testing, horsepower Your letter requests approval of AAMA's recommended determination. Ballast/Target Weight Procedure", as revised Stofflet's December 22, 1993 Fax to Mr. Dave Good of my staff, applicable to Tier 1 HLDTs (which are required to be tested at the adjusted loaded vehicle weight (ALVW) beginning with the 1996 model year).

Procedures for ballasting HLDTs are provided in 40 CFR 86.094-26 (b)(2)(ii) and in Advisory Circular No. 55C. These provisions generally apply to Tier O HLDTs. It is logical to assume that, by requiring Tier 1 HLDTs to be tested at ALVW, test vehicles should be ballasted to ALVW during emission testing, mileage accumulation, and coastdown horsepower determination. On this basis and because our current guidance does not prohibit ballasting HLDTs to ALVW, we hereby approve the use of your "ALVW Ballast/Target Weight Procedure", revised on December 22, 1993, subject to the following considerations:

There is some concern about possible tire blowouts when testing HLDTs on twin roll dynamometers. One of your member manufacturers experienced tire blowouts when testing single-wheel HLDTs on a twin roll dynamometer. It was our understanding that the manufacturer was working with the appropriate tire manufacturers to resolve this problem. Therefore, our approval is conditional on the resolution of any tire safety problems associated with, or inherent, to this procedure. We request that AAMA provide EPA with the status and resolution of this problem, periodically. In addition, we request that AAMA advise EPA of any safety precautions taken by your manufacturers when testing these vehicles, so that EPA may take appropriate safety action during confirmatory tests here.

Another consideration for our approval was that we believe that your procedure will be appropriate for the type of HLDT's and

dynamometers which are in existence today. For example, today's HLDTs consist predominately of front engine, rear-wheel-drive standard-sized pick-up trucks, vans, cab/chassis, and sport utility vehicles equipped with two and sometimes four rear wheels. If the type of vehicles change, we may ask you to revise your ballasting procedure accordingly. Similarly, we expect these vehicles to be tested on two-wheel drive dynamometers, including dual-roll, water brake dynamometers and 48" single-roll, electric dynamometers. If the type of dynamometers change, we may ask you to revise your ballasting procedure, accordingly.

If you have any questions or wish to discuss the issue further, please contact Dave Good of my staff at (313) 668-4450.

Sincerely,

Robert E. Maxwell, Director Certification Division

Enclosure

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